S/N: 10/789,511

Reply to Office Action of 2 June 2006

**Amendments to the Claims:** 

This listing of claims will replace all prior versions, and listings, of claims in

the application:

1. (currently amended) A vehicle, comprising:

an energy producing and storage system including first and second portions

cooperating in a nesting relationship, thereby minimizing vehicle space usage; and

a vehicle body including a floor having a first concavity formed therein for

receiving a third portion of the system from outside the vehicle, the first concavity being

configured to prevent at least some of the third portion from extending beyond the vehicle

body, and to minimize use of vehicle occupant space.

the floor having a second concavity formed therein, the second concavity being

oriented longitudinally along a length of the vehicle and having a depth greater than a depth

of the first concavity, thereby providing a conduit between a front of the vehicle and a rear of

the vehicle.

2. (withdrawn) The vehicle of claim 1, further comprising at least one

transverse support disposed on an inside of the floor along a length of the first concavity,

thereby adding strength to the vehicle body in a transverse direction, the at least one transverse

support being configured to provide an attachment structure for a corresponding vehicle front

seat.

3. (original) The vehicle of claim 1, wherein the system includes a fuel

cell system, and wherein the first portion includes a fuel tank, the second portion includes a

storage device for storing and providing electricity, and the third portion includes a fuel cell

stack.

4. (withdrawn) The vehicle of claim 3, further comprising a pair of

longitudinal supports, each of the longitudinal supports being attached to the vehicle body

across a corresponding portion of the first concavity, thereby adding strength to the vehicle

-3-

S/N: 10/789,511

Reply to Office Action of 2 June 2006

body in a longitudinal direction, each of the longitudinal supports being configured to receive a corresponding mounting bracket of the fuel cell stack.

- 5. (original) The vehicle of claim 3, wherein the storage device is a battery, and the nesting relationship between the fuel tank and the battery is defined by a concave portion of the battery disposed along a length of the battery, generally conforming to a convex portion of the fuel tank disposed along a length of the fuel tank.
  - 6. (canceled)
  - 7. (canceled)
- 8. (currently amended) The vehicle of claim [[6]] 3, wherein the first concavity is oriented generally transverse to the vehicle length, and is disposed below a vehicle front seat.
- 9. (currently amended) A vehicle having a uni-body construction and configured to efficiently package a fuel cell system, the vehicle comprising:
- a fuel cell system including a fuel cell stack, a fuel tank, and a storage device for storing and providing electricity, the fuel tank and the storage device cooperating in a nesting relationship to minimize vehicle space usage; [[and]]
- a first concavity formed in a floor of the uni-body, the first concavity being configured to receive the fuel cell stack from outside the vehicle: and
- a second concavity formed in the floor of the uni-body and oriented longitudinally along a length of the vehicle, the second concavity having a depth greater than a depth of the first concavity, thereby providing a conduit between a front of the vehicle and a rear of the vehicle.
- 10. (original) The vehicle of claim 9, wherein the storage device is a battery, and the nesting relationship between the fuel tank and the battery is defined by a

S/N: 10/789,511

Reply to Office Action of 2 June 2006

concave portion of the battery disposed along a length of the battery, generally conforming to a convex portion of the fuel tank disposed along a length of the fuel tank.

- 11. (canceled)
- 12. (canceled)
- 13. (currently amended) The vehicle of claim [[11]] 10, wherein the first concavity is oriented generally transverse to the vehicle length, and is disposed below a vehicle front seat.
- 14. (withdrawn) The vehicle of claim 13, further comprising a pair of longitudinal supports attached to the uni-body, each of the longitudinal supports being disposed across a corresponding portion of the first concavity, thereby adding strength to the uni-body in a longitudinal direction, each of the longitudinal supports being configured to receive a corresponding mounting bracket of the fuel cell stack.
- 15. (withdrawn) The vehicle of claim 13, further comprising at least one transverse support disposed on an inside portion of the uni-body along a length of the first concavity, thereby adding strength to the uni-body in a transverse direction, the at least one transverse support being configured to provide an attachment structure for a corresponding vehicle front seat.
- 16. (currently amended) A method for packaging an energy producing and storage system in a vehicle, the vehicle including a vehicle body having a floor with [[a]] first concavity and second concavities formed therein, the second concavity being oriented longitudinally along a length of the vehicle and having a depth greater than a depth of the first concavity, thereby forming an open space above the first concavity, the method comprising:

placing first and second portions of the system together in a nesting relationship, thereby minimizing vehicle space usage; [[and]]

S/N: 10/789,511

Reply to Office Action of 2 June 2006

placing a third portion of the system in the first concavity from outside the vehicle such that at least some of the third portion does not extend beyond the vehicle body; and

placing at least one of a coolant line or an electrical wire through the open space above the first concavity.

- 17. (withdrawn) The method of claim 16, wherein the vehicle further includes at least one transverse support disposed along an inside of the floor along a length of the first concavity, the method further comprising attaching at least one vehicle front seat to the at least one transverse support.
- 18. (original) The method of claim 16, wherein the system includes a fuel cell system, and wherein the first portion includes a fuel tank, the second portion includes a storage device for storing and providing electricity, and the third portion includes a fuel cell stack.
- 19. (original) The method of claim 18, wherein placing the first and second portions of the system together in a nesting relationship includes placing a concave portion of the battery adjacent a convex portion of the fuel tank, the concave portion of the battery being disposed along a length of the battery, the convex portion of the fuel tank being disposed along a length of the fuel tank.
- 20. (withdrawn) The method of claim 18, wherein the vehicle further includes a pair of longitudinal supports attached to the vehicle body across a corresponding portion of the first concavity, and the fuel cell includes at least one mounting bracket, the method further comprising attaching the at least one fuel cell mounting bracket to a corresponding longitudinal support.